

# Notice of Allowability

Application No.

09/995,001

Examiner

Haythim J. Alaubaidi

Applicant(s)

MACLEOD ET AL.

Art Unit

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## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment of June 29, 2004.
2. ☒ The allowed claim(s) is/are 2-4,6-9,11-17,33-35 and 37-40.
3. ☒ The drawings filed on 26 November 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 6/14/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

  
**SAFET METJAHIC**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2100**

### **DETAILED ACTION**

1. This communication is in response to the amendment of June 29, 2004.
2. The Examiner acknowledges the Applicants election of invention A, Claims 1-25 and 32-40 in the previous office action of May 30, 2004.
3. The Examiner acknowledges Applicant's cancellation of Claims 1, 10 and 18-32.
4. Claims 5 and 36 were cancelled by the Examiner Amendment.
5. Claims 2-4, 6-9, 11-17, 33-35 and 37-40 are presented for examination following the amendment of June 29, 2004.
6. Claims 2-4, 6-9, 11-17, 33-35 and 37-40 are allowed over the prior art of record.

### **EXAMINER'S AMENDMENT**

7. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for the examiner's amendment in regard to the cancellation of Claims 5 and 36 was given in a telephone interview with Mr. Brian G. Hart on December 17, 2004.

The Application was amended by canceling both Claims 5 and 36 as follows:

Claim 5. ~~A method as recited in claim 7, wherein the first property is described by an XML string, the XML string being compatible with the complex data type.~~

~~Claim 36. A server as recited in claim 38, wherein the first property is described by an XML string, the XML string being compatible with the complex data type.~~

Authorization for the following examiner's amendment was given in a telephone interview with Mr. Brian G. Hart on December 21, 2004.

The Application was amended as follows:

Claim No. 7. A **computer implemented** method for extending a directory schema independent of schema modification, the method comprising:

instantiating, **by an application program**, a first object instance of a content class comprising a flexible attribute that is based on a complex data type, the first object instance being created in a directory based on the directory schema, the content class and flexible attribute being defined in the directory schema;

accessing, **by the application program**, a first property to the attribute, the first property being operational or data providing in nature, the property having a data type that is independent of the complex data type; and

independent of directory schema modification:

(a) instantiating a second object instance of the content class, the second object comprising a second flexible attribute that is base on the complex data type;

(b) assigning a second property to the second flexible attribute, the second property having a different number of data elements than the first property; and

(c) wherein each data element in the first and second properties comprising

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data such **that** neither the first or second properties contribute to data sparsity of a directory based on the directory schema.

Claim No. 7.        A **computer implemented** method for extending a directory schema independent of schema modification, the method comprising:

instantiating, **by an application program**, a first object instance of a content class comprising a flexible attribute that is based on a complex data type, the first object instance being created in a directory based on the directory schema, the content class and flexible attribute being defined in the directory schema;

accessing, **by the application program**, a first property to the attribute, the first property being operational or data providing in nature, the property having a data type that is independent of the complex data type; and

independent of directory schema modification:

(a) instantiating a second object instance of the content class, the second object comprising a second flexible attribute that is base on the complex data type;

(b) assigning a second property to the second flexible attribute, the second property having a different number of data elements than the first property; and

(c) wherein each data element in the first and second properties comprising data such **that** neither the first or second properties contribute to data sparsity of a directory based on the directory schema.

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Claim No. 8. A **computer implemented** method for extending a directory schema independent of schema modification, the method comprising:

instantiating, **by an application program**, a first object instance of a content class comprising a flexible attribute that is based on a complex data type, the first object instance being created in a directory based on the directory schema, the content class and flexible attribute being defined in the directory schema;

accessing, **by the application program**, a first property to the attribute, the first property being operational or data providing in nature, the property having a data type that is independent of the complex data type; and

independent of directory schema modification:

without modifying the directory schema, instantiating a second object instance of the content class, the second object comprising a second flexible attribute that is base on the complex data type; and

assigning a second property to the second flexible attribute, the second property being completely independent of any operational or data characteristics of the first property.

Claim No. 15. A server comprising:

a processor coupled to a memory, the memory comprising computer executable instructions, the processor being configured to fetch and execute the computer-executable instructions for;

instantiating a first object instance of a content class comprising a flexible attribute that is based on a complex data type, the first object instance being created in a directory based on the directory schema, the content class and flexible attribute being defined in the directory schema;

accessing a first property to the attribute, the first property being operational or data providing in nature, the property having a data type that is independent of the complex data type; and

independent of directory schema modification:

(a) instantiating a second object instance of the content class, the second object comprising a second flexible attribute that is base on the complex data type;

(b) assigning a second property to the second flexible attribute, the second property having a different number of data elements than the first property; and

(c) wherein each data element in the first and second properties comprising data such that neither the first or second properties contribute to data sparsity of a directory based on the directory schema

Claim No. 38. A server for extending a directory schema independent of schema modification, the server comprising:

Processing means for:

instantiating a first object instance of a content class comprising a flexible attribute that is based on a complex data type, the first object instance being created in

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a directory based on the directory schema, the content class and flexible attribute being defined in the directory schema;

accessing a first property to the attribute, the first property being operational or data providing in nature, the property having a data type that is independent of the complex data type; and

independent of directory schema modification:

(a) instantiating a second object instance of the content class, the second object comprising a second flexible attribute that is base on the complex data type;

(b) assigning a second property to the second flexible attribute, the second property having a different number of data elements than the first property; and

(c) wherein each data element in the first and second properties comprising data such that neither the first or second properties contribute to data sparsity of a directory based on the directory schema

***Allowable Subject Matter***

8. Claims 2-4, 6-9, 11-17, 33-35 and 37-40 are allowed over the prior art of record.
9. The following is the Examiner's statement of reasons for the indication of allowable subject matter:

Regarding Claims 7, 15 and 38, Applicant's particular system and associated methods in environment for extending a directory schema independent of schema modification is the combinations of wherein the property is the first property comprising a particular number of data elements, and wherein the method further comprises: independent of directory schema modification: (a) instantiating a second object instance of the content class, the second object comprising a second flexible attribute that is based on the complex data type; (b) assigning a second property to the second flexible attribute, the second property having a different number of data elements than the first property; and (c) wherein each data element in the first and second properties comprises data such neither the first or second properties contribute to data sparsity of a directory based on the directory schema record in combination with the other limitations of the claims, was not disclosed by, would not have been obvious over, nor would have been fairly suggested by the prior art of record or that encountered in searching of the prior art.

The dependent Claims 2-4 and 6 being further limiting to independent Claim 7; dependent Claims 11-14 being further limiting to independent Claim 15; and dependent Claims 33-37 being further limiting to independent Claim 38 definite and enabled by the Specification are also allowed.

Regarding Claims 8, 16 and 39, Applicant's particular system and associated methods in environment for extending a directory schema independent of schema modification is the combination of wherein the object instance is a first object instance,



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wherein the property is the first property, and wherein the method further comprises: without modifying the directory schema, instantiating a second object instance of the content class, the second object comprising a second flexible attribute that is based on the complex data type; and assigning a second property to the second flexible attribute, the second property being completely independent of any operational or data characteristics of the first property; and wherein the first and second properties are described by respective XML strings that are compatible with the complex data type in combination with the other limitations of the claims, was not disclosed by, would not have been obvious over, nor would have been fairly suggested by the prior art of record or that encountered in searching of the prior art.

The dependent Claim 9, being further limiting to independent Claim 8; dependent Claims 17, being further limiting to independent Claim 16; and dependent Claims 40 being further limiting to independent Claim 39 definite and enabled by the Specification are also allowed.

### ***Points of Contact***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Haythim J. Alaubaidi whose telephone number is (571) 272-4014. The examiner can normally be reached on Monday - Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic, can be reached on (571) 272-4023.

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Any response to this office action should be mailed to:


The Commissioner of Patents and Trademarks, Washington, D.C. 20231 or telefax at our fax number (703) 872-9306.

Hand-delivered response should be brought to Crystal Park II, 2121 Crystal Drive, 6<sup>th</sup> Floor Receptionist, Arlington, Virginia. 22202.

*Haythim J. Alaubaidi*

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Patent Examiner  
Technology Center 2100  
Art Unit 2161  
December 21, 2004

  
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